WATER LINES

NEWS FROM THE WATER RESOURCES DIVISION
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION • FALL 1997

MISSION: TO PROVIDE THE MOST BENEFIT, THROUGH THE BEST USE, OF THE STATE'S WATER RESOURCES FOR THE PEOPLE OF MONTANA

DEPARTMENT NEWS

DEADMAN'S BASIN DIVERSION DAM REPAIR

DEADMAN'S BASIN DIVERSION DAM IS THE INITIAL STRUCTURE OF THE 72,220 ACRE-FOOT (AF), STATE-OWNED, OFF-STREAM WATER STORAGE PROJECT LOCATED APPROXIMATELY 22 MILES EAST OF HARLOWTON. The dam is operated and maintained by the Deadman's Basin Water Users Association (DBWUA). The project was completed in 1941, rehabilitated in 1958, and has been in continuous service. The project supplies water to irrigators below the basin as far east as Melstone, irrigating approximately 16,000 acres, and is a major source of irrigation water in the lower Musselshell basin. The project has a notable influence on the agricultural economy of the Musselshell basin. The reservoir has a significant secondary use as a recreation site for the surrounding community within a 100-mile radius.

Deadman's Basin Diversion Dam — *Photo by Kurt Hafferman*

The Musselshell River, like many rivers in Montana, had a long period of high spring runoff this year. The peak flow near the main diversion dam was almost 6,000 cubic feet per second, which was above the 1-in-20 probability flood stage. As a result of the flooding, the riprap protection on the downstream side of the dam was significantly damaged and, after a prolonged period of flooding, a breach occurred under the dam, allowing water to run under the dam.

The approach to repairing the breach will be to dewater the site above the dam using a coffer dam, reroute the river around the project, dewater the site using dewatering wells, excavate the upstream and downstream sides, install a clay cutoff wall on the upstream side, backfill with native material upstream and downstream, and overburden and protect the areas above and below the upstream and downstream faces with a geosynthetic blanket and large stone riprap. Once the upstream and downstream areas have been repaired, the void under the dam will be filled. Plans are to cut through the concrete on the splash apron, exposing the void, and fill the void with either compacted fill (if it is possible to work under the apron) or with lean concrete (if there is not enough room to work.)

The Department of Natural Resources and Conservation (DNRC) is currently pursuing funding for the project through a Federal Emergency Management Agency (FEMA) disaster declaration for Wheatland County that is administered by the Montana Disaster and Emergency Services. The project has been inspected by FEMA and is currently being reviewed. It is anticipated that the review and recommendation will be completed by early October. The FEMA program will supply a 75 percent cost share grant, and the DBWUA or DNRC will be responsible for the other 25 percent.

EMPLOYEES RECOGNIZED

Photo by Don Howard

Jim Beck, civil engineering specialist with the Helena Regional Office, receives a longevity award for 15 years of service.

On July 18, 1997, an awards ceremony was held in Constitution Park to recognize Water Resources Division staff for outstanding performance and longevity.

Special recognition plaques were given to Kurt Hafferman and Sterling Sundheim for their work on the rehabilitation of the Petrolia Project, to Bob Arrington for his work in evaluating the impacts of the Tongue River Project, and to Ron Miller for his work on obtaining funding for a Fort Peck area rural water system.

Other special recognition or "Good Job" certificates were given to Sonja Hoeglund, T. J. Reynolds, the Water Rights Bureau, Terri McLaughlin, Nancy Hughes, Mary Ellen Wolfe, Mike McLane, Mary Vandenbosch, Pat Riley, Brent Esplin, Marvin Cross, and Jan Mack.

Longevity awards were given to Rob Kingery, Jesse Aber, Ann Goetze, Tod Gass, John Hunter, Wendell Williams, and Dave Adair for 5 years of service; Allan Kuser, Bill Uthman, Diane McDuffie, and Gayle Phillips for 10 years of service; Jim Beck for 15 years of service; Chuck Brasen for 20 years of service; and Bob Clark and Jim Kindle for 25 years of service.

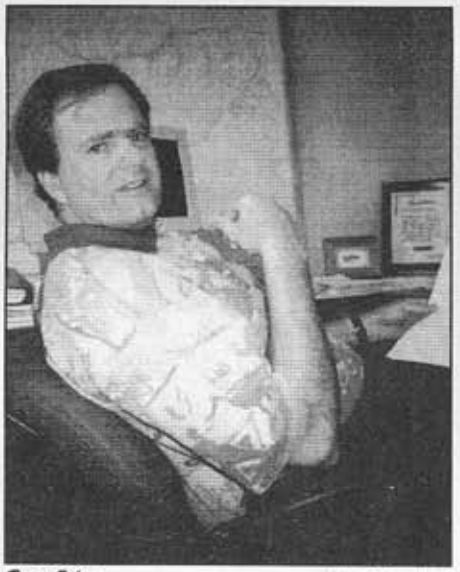
Congratulations to Everyone for a Job Well Done!!

WATER RESOURCES DIVISION ADMINISTRATOR RETIRES

Gary Fritz retired on June 30 after serving 18 years as administrator of the Water Resources Division. Fritz moved to Montana to work for the Water Resources Division in January 1974 and began serving as administrator in May 1979.

Fritz's commitment to working with people inside and outside of the agency to "get things done" is evident upon reviewing a few of the highlights of his career.

When the law authorizing water reservations in the Yellowstone River basin was passed, Fritz noted that, in contrast with state agencies, municipalities and agricultural water users did not have the resources to develop applications. Fritz and Ole Ueland, then administrator of the Conservation Districts Division, traveled around the basin and spoke with every conservation district and major municipality. Ueland noted that Fritz was a strong supporter of conservation districts using the water reservation process to plan for the future.



Gary Fritz *Photo by Jim Bond*

When a fish kill occurred in the Ruby River below the Ruby Reservoir, Fritz recommended that a diverse task force be established and that it be co-chaired by representatives of Ruby Valley irrigators and recreation interests. He recognized the value of local problem-solving. After visiting extensively with local residents, he saw that there was an opportunity for the task force to develop long-term solutions that would address a variety of local concerns. The success of the Ruby River Reservoir Task Force helped to launch several initiatives, including a task force that developed a proposal to provide fishing access.

Rehabilitation of the Tongue River Dam is another highlight of Fritz's career. Fritz played a critical role in compact negotiations and obtaining funding from Congress for this $64 million project. He marshaled the resources to keep the project on schedule despite many obstacles. When the department was not satisfied with a contractor's work on a draft environmental impact statement, he put together a team of agency staff that produced a superior product on schedule and under budget.

Fritz is quick to credit others for these accomplishments. For example, it was former director Karen Barclay who made the decision to fix the Tongue River Dam, and numerous department staff have worked tirelessly on the Tongue River project. This quality in a division administrator was valuable and appreciated. Gerhard Knudsen, former assistant administrator for the division, explained Fritz was very receptive to new ideas. Furthermore, he promoted ideas developed by other people, and he gave credit to people for their ideas and their work.

Fritz was committed to finding new and more efficient ways of providing services to Montanans. He streamlined the Water Resources Division by eliminating unnecessary supervisory positions. He also made a decision to decentralize certain activities to the division's eight regional offices in order to better serve citizens in all parts of the state.

Water will continue to be a central theme in his career as Fritz devotes full time to his fly-fishing outfitting business, Osprey Expeditions.

TEXAS LEGISLATURE ADOPTS UPDATED STATE WATER PLAN

AUSTIN, TEXAS — THE STATE OF TEXAS HAS UNDERGONE WHAT MANY WOULD CALL A "SEA CHANGE" IN ITS APPROACH TO WATER MANAGEMENT.

The legislature recently passed Senate Bill 1, a 202-page state water plan that has turned the planning process on its head, so to speak.

"In the past," said Tommy Knowles, deputy executive administrator of the Texas Water Development Board, "the water plan was designed from the top down, with the state dictating to the cities and municipalities. Senate Bill 1 gave us a water plan that works from the bottom up."

Each region, he said, is now required to work out its own long-range water management plan — including a drought management plan — and those regional plans will be incorporated into the state water plan.

This is one of the more significant aspects of the bill, said Knowles, and is certain to have far-reaching effects. This more collaborative structure will enable state planners and water users — from industry and irrigators to city and rural residents — to work together more effectively in managing water resources for the benefit of all, he explained.

Knowles said the drought management plan sets up a state drought response and monitoring committee, which is chaired by the Governor's Division of Emergency Management, though the governor may designate other individuals to serve on the committee as well.

The law now requires all public water systems (wholesale and retail water service providers and irrigation districts) to have drought contingency plans. Also, he said, any municipal water service providing more than 1,000 acre-feet a year, or any irrigator using more than 10,000 acre-feet a year, must now have a water conservation plan, which, he added, must be in accord with the regional water plan.

This, said Knowles, is another important step in achieving long-term planning.

The "right of capture" provision of Texas water law has not changed, but groundwater management districts are now required to have a plan of how they will manage groundwater. This will probably involve some changes in conventional practices, said Knowles, because this will be a performance-based plan audited by the state.

"All funding and permit decisions must be consistent with regional plans," said Knowles. "Eventually every aspect of water management must be in agreement with those plans."

The Texas Water Development Board (TWDB), the funding agency, and the Texas Natural Resources Conservation Commission (TNRCC), the state's regulatory agency, will be working together even more closely, he said, to achieve this goal.

The TNRCC, for example, may now consider the impacts of surface water permitting on groundwater management. Before Senate Bill 1 passed, state regulators could not do this, said Knowles. Now, they may.

"This is really a ground-breaking statute," said Knowles. "It gives the commission additional enforcement authority, enhances data collection, and coordinates funding."

Knowles explained that the $42 million plan includes an "implementing statute" which will allow coordinated use of bond money approved by voters for water supply, quality, and flood prevention. The new law requires a positive vote on a constitutional amendment on state loan programs in November, he said, in order to make use of this provision.

Another significant provision in the new law is the section on interbasin transfers. Any water transfer of this nature, said Knowles, must be based on both environmental and economic analyses in both basins, "and the benefit to those receiving the water must be larger than the detriment to those losing water. Any decision on interbasin transfers," he added, "must be multi-layered, with a large number of variables taken into account."

The law also provides mechanisms for mitigation to the basin of origin, he said.

"It's remarkable," Knowles concluded, "that such sweeping changes passed so quickly after last year's drought. Most of it will be effective September 1."

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SCIENTISTS SAY GLOBAL WATER RESOURCES NEED INTERNATIONAL COOPERATION

ALBUQUERQUE (AP) — AN INTERNATIONAL CONFERENCE ON THE GROWING PROBLEM OF GLOBAL DESERTIFICATION HAS ENDED WITH HOPES THAT NEW TECHNOLOGIES MAY HELP POORER NATIONS BETTER MANAGE THEIR WATER RESOURCES. Rivers often cross international boundaries, and that calls for regional, international solutions, said Dennis Engi, manager of strategic initiatives at Sandia National Laboratories in Albuquerque. Turkey, for example, is building dams that would also affect water supplies in Syria and Iraq downstream, said Engi." "If either of those two countries is unhappy, obviously there's going to be some political conflict," Engi said. "We have the necessary technologies to get a better handle on the available water. With our technology, they [the Turks] can simply play out the different water resource management strategies on a computer." Israel has some water conflicts with the Palestinians in the West Bank and Gaza Strip, as well, he said.

One reason for the three-day International Drylands Conference here was to let Sandia help form partnerships among countries and get some projects rolling. The workshop brought environmental researchers from around the world to discuss political problems caused by drylands. Mary Morris, an

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WATER RESOURCES DIVISION HAS NEW ADMINISTRATOR

Photo by Jim Bond

Jack Stults

JACK STULTS IS THE NEW ADMINISTRATOR FOR THE WATER RESOURCES DIVISION. JACK REPLACES GARY FRITZ, WHO RETIRED AFTER 18 YEARS OF SERVICE.

Jack has worked in various positions for the Department of Natural Resources and Conservation for the past 13 years. He began employment with the department in 1984, working on the statewide adjudication program, first in the Helena regional office and later in the program's central office. This included writing the rules which govern the division's examination of water right claims, interaction with claimants, and reporting to the water court. He then served as division hearings officer/ examiner for four years (1990-1994) hearing and deciding water law cases. Most recently, Jack supervised the division's eight regional offices, staffed by 51 employees who implement all of the divison's programs statewide.

In addition, Jack has served for the past four years as one of five nonpartisan city commissioners for the City of Helena.

Jack has focussed on bringing consensus-based processes to the city's public decisions, and ensuring that the public is involved early and often. He hopes to apply the lessons learned as city commissioner, especially when working with controversial development, infrastructure, and budgeting issues, to his role as administrator of the Water Resources Division.

INTERNATIONAL COOPERATION

(Continued from page 3)

independent consultant from Los Angeles, said some of the governments most affected by the problem have been unwilling to fund the necessary research. She said many of them don't realize their national security could be imperiled. "Once you get countries thinking about environmental problems as a security threat, then you get the money to solve the problems," she said.

Ideas discussed here will be presented at a conference in Rome in October focusing on a United Nations treaty to halt desertification. The Convention to Combat Desertification was aimed at fighting destruction of valuable agricultural land. That agreement stems from the 1992 Earth Summit in Rio de Janeiro, Brazil. It gives priority to Africa, where desertification has had the greatest impact.

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WATER INSIDE LINES

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